

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

What is claimed is:

Claim 1. A flexible electrode antenna having a machine direction and a cross direction comprising:

a layer of conductive material comprising a layer of nickel;

a layer of flame retardant material adhered to a first side of the layer of conductive material; and

a layer of non-woven protective material adhered to a second side of the layer of conductive material,

wherein the antenna has tear resistance values using test standard ASTM D 1004-94A of from about 8.0 to about 11.6 pounds in the machine direction, and from about 9.7 to about 20.7 pounds in the cross direction.

Claim 2. A flexible electrode antenna having a machine direction and a cross direction comprising:

a layer of conductive material comprised of a polymer substrate having a metalized layer on a first major surface of the substrate;

a layer of flame retardant material adhered to a first side of the layer of conductive material; and

a layer of non-woven protective material adhered to a second side of the layer of conductive material,

wherein the antenna has tear resistance values using test standard ASTM D 1004-94A of from about 8.0 to about 11.6 pounds in the machine direction, and from about 9.7 to about 20.7 pounds in the cross direction.

Claim 3. The flexible electrode antenna of Claim 2, wherein the metalized layer on the first major surface of the polymer substrate comprises a layer of nickel.

Claim 4. The flexible electrode antenna of Claim 2, wherein the metalized layer on the first major surface of the polymer substrate comprises layers of nickel and copper.

Claim 5. The flexible electrode antenna of Claim 1, wherein the flame retardant layer is glass cloth.

Claim 6. The flexible electrode antenna of Claim 5, wherein the glass cloth is formed of blown glass fibers.

Claim 7. The flexible electrode antenna of Claim 1 wherein the protective material is a non-woven PET.

Claim 8. The flexible electrode antenna of Claim 2 wherein the protective material is a non-woven PET.

Claim 9. The flexible electrode antenna of Claim 2, wherein the flame retardant layer is glass cloth.

Claim 10. The flexible electrode antenna of Claim 9, wherein the glass cloth is formed of blown glass fibers.